

REMARKS

In the Office Action dated March 31, 2005, the Examiner requested that the applicant review the lengthy specification to determine the presence of any possible minor errors. After a careful review, the applicant has amended the specification to correct minor errors noted in the text. The minor errors are corrected in the preceding portion of this amendment.

In the Office Action, claims 1-36 were rejected under 35 USC §103(a) as being unpatentable over the Sneeringer U.S. Patent No. 6,618,709 in view of the Stone et al U.S. Patent No. 6,446,045. After reviewing the combination of references cited by the Examiner, the applicant hereby disagrees with the findings of the Examiner. Reconsideration of the claim rejections in view of the following arguments for allowance is respectfully requested.

Claims 1-36

Independent claim 1 of the present application is directed to a method of providing a program to a utility of a commodity where the program is aimed at managing demand for the commodity at a customer site. The customer site includes a plurality of devices, each of which use the commodity. As required by claim 1, the program defines a subset of the plurality of devices for which usage of the commodity may be managed by activating the program. The method measures the instantaneous rate at which the commodity is being delivered to the subset of devices, sends the instantaneous rate for each of the devices to the utility and determines, in real time, the capacity associated with the delivery of the commodity to the subset of devices that is available for management by activating the program. As described in the specification of the present application, the capacity associated with the delivery of the commodity to the subset of devices can be managed by activating the program. Thus, by determining in real time the capacity associated with the delivery of the commodity to the subset of devices, the utility can

determine the amount of consumption of the commodity that can be shed by activating the program. In this manner, the utility can manage the demand for the commodity by selectively activating the program.

The Sneeringer '709 patent is directed to a program or system that monitors and gathers data related to the consumption of a utility commodity and provides the consumption information to customers of the utility. The Sneeringer '709 patent reports on the historical consumption by a customer such that the customer can better understand their consumption patterns. As described in column 6 of the '709 patent, the invention provides the ability to monitor resource usage over a global computer network. The system includes a resource-metering data recorder that records resource usage measured by a resource meter. The stored usage information is sent to a database that can be accessed by a user, where the database accumulates resource management information based on usage data from the individual meters. Preferably, the server hosting the database includes resource management software capable of creating load profiles, load tables and financial management software including pricing, energy cost calculations and cost allocations. The system of the Sneeringer '709 patent reference allows commercial customers to aggregate historical usage data from multiple locations into a single reporting function.

The Sneeringer '709 patent teaches the recording of usage information from individual resource meters and presenting the usage information to a user. Based upon this information, the user can then selectively make aggregate energy usage estimates and be in a position to purchase larger chunks of energy for facilities to achieve economies of scale, as described in column 16, lines 30-59. Throughout the entire specification of the Sneeringer '709 patent, the information received from the resource meters is used by the consumer to better manage their energy usage and reduce energy costs. The Sneeringer '709 patent does not teach or suggest providing any type of program to a utility such that the utility, not the consumer, can control the consumption of a commodity based upon the current, real time demand for the commodity. Thus, the Sneeringer '709 patent is

directed to providing a useful tool to the consumer for reducing energy costs rather than to the utility for controlling demand.

In the Office Action, the Examiner cited the Stone '045 patent in combination with the Sneeringer '709 patent to reject each of the independent claims in the application. Specifically, the Examiner cited the Stone '045 reference to show a program having a subset of the plurality of devices for which use of the commodity may be managed by activating the program.

The Stone '045 reference cited by the Examiner is directed to a vastly different field of technology from the subject matter of the present invention. The Stone '045 reference is directed to a system that allows sellers to create presentations for their inventory, products, goods and/or services in any one of a variety of supported media outlets, such as newspapers, catalogs, on-line directories or other types of varied media, such as skywriting, billboards or similar outlets. The system of the present invention automatically prompts the seller for information that is used in creating the presentation for the media outlet chosen. The system further provides the seller the ability to control inventory and globally update, in real time, time sensitive inventory and potentially restrict sales or marketing activity when the inventory is exhausted or sold out. The Stone '045 reference does not have any relevance to a utility that provides a commodity and a program for managing the demand for the commodity and reducing the demand by activating a program.

As described above, the subject matter of claim 1 in the pending application is directed to a method of providing a program to a utility where the program is aimed at managing demand for a commodity delivered to a customer site by the utility, where the customer site has a plurality of devices that consume the commodity. The method defines a program that has a subset of devices where the instantaneous rate of consumption is measured and sent to the utility. In real time, the method determines the demand for the commodity and thus the capacity for the commodity associated with the delivery of the commodity to the subset of devices. The capacity being delivered to the subset devices

defines an amount of demand for the commodity that can be managed by activating the program.

Clearly, the Sneeringer '709 patent does not teach or suggest the step of providing a program to the utility that includes a subset of the devices and monitoring the instantaneous rate at which the commodity is being delivered to the subset. Further, the Sneeringer '709 patent does not teach determining a capacity associated with the delivery of the commodity to the subset devices that may be available for management by activating the program. Instead, the Sneeringer '709 patent teaches periodically recording the usage data, where the usage data is downloaded to a utility at selected intervals. Once the information is available at the utility, the usage data can be accessed by the customer. The Sneeringer '709 patent does not teach determining, in real time, a capacity associated with delivery of a commodity which may be available for management by activating a program. The Sneeringer '709 reference does not teach or suggest, nor ever contemplate, the use of a program that provides the utility the ability to manage demand for a commodity.

The Stone '045 patent also does not teach or suggest the provision of a program that allows a utility to manage demand for a commodity. Instead, the Stone '045 reference is directed to an inventory management system that allows for interactive access to presentations, sales distribution figures, and other functions. The Stone '045 patent is not remotely related to the subject matter of the present invention and clearly does not contemplate the use of a program by a utility to selectively manage the demand of a commodity.

Based upon the above arguments, independent claim 1 is believed to be allowable over the combination of references cited by the Examiner.

Claims 2-26 depend directly or indirectly from claim 1 and are thus believed to be allowable based upon the above arguments for allowance, as well as in view of the subject matter of each claim.

Dependent claim 2 includes the steps of activating the program and measuring at least one of the rate and a change in the rate at which the commodity is being delivered to the subset of devices as a result of activating the program. This feature allows the utility to have feedback on the effect the activation of the program has on the demand for the commodity. This feature is not shown or suggested by the subject matter of the Sneeringer '709 patent as stated by the Examiner.

Claim 3 includes the step of determining an actual capacity of the commodity saved by activating the program. This allows the utility to determine the actual reduction in the amount of commodity used by activating the conservation program. Once again, the Examiner stated that the Sneeringer '709 taught this step. However, upon a detailed review, the Sneeringer '709 reference does not teach the use of any type of energy management program, let alone the use of a program to determine the actual capacity of the commodity saved by activating a load management program. Thus, claim 3 is clearly allowable over the references cited by the Examiner.

Claim 4 adds the step of providing at least one of an alternate rate or a billing adjustment rebate for the consumer based upon the actual capacity managed at the customer site by activation of the program. This feature allows the utility to provide rebates for cost adjustments to the consumer based upon the actual amount of commodity usage modification imposed on the customer by the utility through the activation of the program. Once again, this feature is not remotely suggested by the Sneeringer '709 reference.

Claim 8 includes the step of allowing a customer to selectively subscribe to the program, thus allowing the utility to modify the commodity consumption at the customer only upon subscription to the program. As described above, the Sneeringer '709 reference does not teach the use of a commodity management program. Thus, since the Sneeringer '709 patent does not even teach the use of such a program, there can be no teaching of allowing a customer to selectively subscribe to such a program. For this

reason, claim 8 is also believed to be allowable over the combination of the references cited by the Examiner.

Claim 11 includes the step of delivering the commodity to the customer sites through a distribution network, where the step of determining the capacity available in real time is determined across the distribution network. Once again, the Sneeringer '709 reference does not teach or suggest determining the capacity available within a program in real time. Thus, claim 11 is believed to be allowable.

Claims 12 and 13 include the steps of providing a graphical representation of the capacity available across the distribution network. Once again, the Sneeringer '709 patent does not teach the determination of a capacity of energy commodity that can be managed by the utility. Instead, the Sneeringer '709 patent simply collects commodity consumption on a historic basis and allows the user to view and selectively aggregate the energy consumption from multiple sites for the purpose of cost savings in the purchase of energy. The Sneeringer '709 patent does not teach utilizing a graphical representation of the capacity available for management across the distribution network. For this reason, claims 12 and 13 are believed to be allowable.

Claim 22 includes the step of defining a plurality of programs where each program has a respective subset of devices and the method includes the step of providing a search function for identifying at least one program that matches a set of conditions. Clearly, the Sneeringer '709 patent does not teach utilizing a plurality of programs, since the Sneeringer '709 patent does not even teach the use of a single program for modifying the consumption of a commodity by multiple devices at a customer site. Thus, claim 22 is believed to be in condition for allowance.

Claim 28 further includes the step of manually activating a program as a function of an actual demand of the commodity. This step allows the utility to reduce the demand for a commodity during periods of increased demand. Since the method determines the capacity associated with the program in real time, the manual activation of the program will reduce the demand of the commodity on a real time basis. The

Sneeringer '709 patent does not contemplate the use of a program to manage the use and management of a commodity. Thus, claim 28 is believed to be in condition for allowance.

Claim 30 includes the step of managing the subset of devices in response to the activation of a program. The Sneeringer '709 patent does not teach the management of any energy consuming device based upon the activation of any type of program. In fact, the Sneeringer '709 patent does not suggest the use of any program provided to the utility to monitor the energy consumption in real time. Thus, claim 30 is believed allowable over the Sneeringer '709 patent.

Claim 32 includes the step of modifying the setpoint of the subset devices upon activation of the program. Thus, when the program is activated, the setpoint of the subset of devices is adjusted to reduce the amount of commodity being consumed. This feature is not taught or suggested by the Sneeringer '709 patent.

Based upon the above arguments for allowance, claims 1-36 are believed to be allowable based upon the combination of the Sneeringer '709 and Stone '045 references.

Claim 37

In the Office Action, independent claim 37 was found unpatentable over the same combination of the Sneeringer '709 and Stone '045 references. The applicant hereby disagrees with such finding by the Examiner.

Independent claim 37 is directed to a method of providing a program to a utility of a commodity where the program is aimed at managing the demand for a commodity delivered to at least one customer site that has a plurality of devices that use the commodity. The program includes a plurality of devices that may be managed by activating the program. The instantaneous rate at which the commodity is delivered to the subset devices is measured and sent to the utility. The utility determines, in real time, the capacity associated with the delivery of the commodity to the subset of devices that

may be managed by activating the program. Once the program is activated, an actual rate of consumption of the commodity is determined and a rate of change of consumption induced by the activation of a program is also determined. Based upon this determination, one of an alternate billing rate and a billing adjustment is provided to the customer as a function of the actual capacity managed at the customer site by the program. In this manner, the utility can reduce the demand for the commodity, monitor the reduction in the rate of consumption induced by the activation of the program and provide a billing adjustment or lower rate to the customer as a function of the actual capacity managed.

In the Sneeringer '709 patent, there is no teaching or suggestion of setting up a program at the utility that determines the capacity of a commodity being utilized, where the activation of the program will result in the reduction of the amount of commodity being utilized. Further, the Sneeringer '709 patent does not teach or even remotely suggest the monitoring of the rate of consumption of a commodity and providing billing incentive to the customer as a function of the actual capacity managed.

The Stone '045 reference is not even remotely related to the field of the invention and thus does not suggest defining a program having a subset of devices as suggested by the Examiner. Based upon these differences, claim 37 is believed to be allowable over the combination of references cited by the Examiner.

Claim 38

Independent claim 38 is similar to claim 37 and is believed to be allowable based upon the arguments set forth above. Specifically, claim 38 determines, in real time, the capacity associated with the delivery of a commodity to a subset of devices defined by a program. Once the program is activated, the system verifies the management of the devices within the subset of devices. As set forth above, neither the Sneeringer '709 or Stone '045 patents teach, either alone or in combination, the features required by independent claim 38. Thus, claim 38 is believed to be in condition for allowance.

Claim 39

Independent claim 39 closely corresponds to independent claim 1 discussed above. However, independent claim 39 is directed to the more specific use with the delivery of electrical power to a plurality of devices rather than just a commodity, as set forth in claim 1. Independent claim 39 was rejected based upon the same combination of references used by the Examiner in rejecting independent claim 1.

For the reasons set forth above in the arguments for allowance of independent claim 1, claim 39 is believed to be in condition for allowance over the combination of references cited by the Examiner.

Claims 40-41 depend directly or indirectly from claim 39 and are believed to be allowable based upon the subject matter of claim 39, as well as in view of the subject matter of dependent claims 40-41.

Claim 42

Independent claim 42 is directed to a system that provides at least one program to a utility of a commodity where the program is aimed at managing demand for the commodity, where the commodity is delivered to a customer site having a plurality of devices that use the commodity. The system includes a control system that controls the delivery of the commodity and determines, in real time, the capacity associated with the delivery of the commodity that may be available by activating the program as a function of the measured instantaneous rate of consumption. Thus, claim 42 allows the utility to activate a program to control the consumption of a commodity. The activation of the program can be controlled by monitoring the instantaneous rate at which commodity is being delivered to the subset of devices that are part of the program.

As discussed above in the arguments for allowance of the previous independent claims, the Sneeringer '709 reference, either alone or in combination with the Stone '045 patent, does not teach or suggest the use of a utility interface that defines a

program having a subset of devices for which usage of the commodity may be limited by activating the program. Further, the combination of references cited by the Examiner does not teach or suggest the control system for determining, in real time, a capacity associated with the delivery of a commodity that may be available by activating the program.

Based upon these distinctions, as well as the arguments for allowance of the remaining independent claims, claim 42 is believed to be in condition for allowance.

Claims 43-67 depend directly or indirectly from claim 42 and are believed to be in condition for allowance based upon the above arguments for allowance, as well as in view of the subject matter of these claims.

Claim 69

Claim 69 is directed to a system similar to that described in independent claim 42. However, claim 69 further defines the distribution network as including at least one transmission substation, at least one distribution substation associated with each transmission substation, and at least one circuit associated with the transmission substation. Claim 69 specifies that the control system can determine, in real time, a capacity available on at least one of the transmission substations, at least one distribution substation and at least one circuit network that may be managed by activating the program. Thus, the system as required by claim 69 allows the utility to determine, in real time, the capacity available at different levels of the distribution network and the amount of commodity that may be managed by activating the program at each of the different levels of the distribution network.

The Sneeringer '709 reference, either alone or in combination with the Stone '045 reference, does not teach or suggest a utility interface that defines a program having a subset of devices for which the usage of a commodity may be managed by activating the program. Further, the combination of references cited by the Examiner does not teach a control system coupled to the utility interface for controlling the delivery

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of the commodity and determining the capacity available on each level of the distribution network such that the delivery of the commodity may be managed by activating the program.

Based upon these distinctions, as well as the differences set forth above in the arguments for allowance in the remaining independent claims, independent claim 69 is believed to be in condition for allowance.

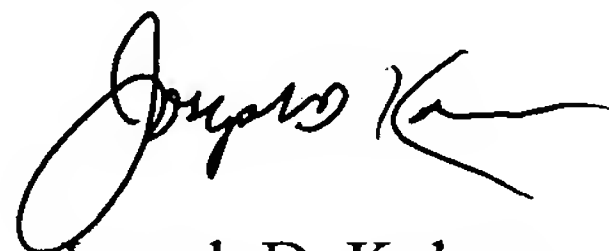
Claims 70-71 depend directly or indirectly from claim 69 and are thus believed to be in condition for allowance based upon the above arguments for allowance as well as in view of the subject matter of each claim.

Conclusion

Based upon the above amendments and the arguments for allowance, claims 1-67 and 69-71 are believed to be in condition for allowance. The Examiner is invited to contact the applicant's undersigned attorney to facilitate prosecution of the present application.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Joseph D. Kuborn", with a stylized flourish at the end.

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